Claims 1-9, 11-14 were rejected under 35 USC §102(b) as being anticipated by *Colombo* (EP 0109059 or EP0109060). EP 0109059 discloses a process to produce propylene using as feed olefinic cuts from C4 to C12 and using zeolites in their acid or modified form and having a silica to alumina ratio of, or lower than 300 (**corresponds to a Si/Al atomic ratio lower than 150**) at a space velocity higher than 50 kg/h of olefins per kg of pure zeolite and at a temperature of from 400 to 600°C. The subject matter of claim 1 of the claimed invention differs from that of EP 0109059 in that a **minimum value of 180 for the Si/Al atomic ratio** is disclosed. Accordingly, EP 0109059 does not anticipate the atomic ratio range defined in Claim 1. Therefore, Claim 1 is novel over the disclosure EP 0109059.

In addition, the EP 0109059 specification requires high space velocity of greater than 50Kg/h per kg of pure zeolite in order to achieve high propylene yield.

EP 0109060 discloses a process to produce propylene using as feed olefinic cuts from C4 to C12 and using zeolites having a silica to alumina ratio of or higher than 350 (this corresponds to a **Si/Al atomic ratio of or higher than 175**) at a space velocity of from 5 to 200 kg/h of olefins per kg of pure zeolite compound and at a temperature of from 400 to 600°C. The subject matter of Claim 1 of the application differs from that of EP 0109060 in that a **specific Si/Al atomic range has been defined (from 180 to 1000).** There

is no disclosure or even suggestion in EP 0109060 of an upper limit for the silica/alumina molar ratio. EP 0109060 only exemplifies silica/alumina molar ratio of infinity (see examples 3, 4, 8, 14-25, 32-35). The range defined in Claim 1 in this application is narrowly defined compared to the actual open-ended range disclosed in EP 0109060. In addition, this application defines narrower ranges of temperature, pressure and space velocity.

Claims 1-9, 11-14 were rejected under 35 USC §103(a) as being unpatentable over EP 0109059 & EP 0109060. In the EP 0109059 specification, there is no disclosure of a silicon/aluminium atomic ratio as defined in Claim 1 of this application. Comparative example 5 of this application showed clearly the stability problem of the propylene yield by using a low silicon/aluminium atomic ratio in conjunction with a high space velocity as employed in the process disclosed in EP 0109059. Neither EP 0109059 nor EP 0109060 disclose or suggest a process having a crystalline silicate catalyst with a specific silicon/aluminium atomic ratio having both a lower limit of 180 and an upper limit of 1000.

The examples mentioned in EP 0109060 where silicalite are used have a silica/alumina ratio specified as being infinity. Thus, the cited specification does not teach the skilled person to the claim range. In fact, applicants discovered that by working within

the range claim, they obtained good stability over time of the propylene yield. This is illustrated in figure 1 of the application where high yield of propylene can been obtained over a long time period until 325 time on stream (hours) with a catalyst having an initial silicon/aluminium ratio of around 220. This high stability for the catalyst has not been described in either EP 0109059 or EP 0109060, where only conversion process over short periods, e.g. only a few hours for EP 0109059 and a maximum of 120 hours for EP 0109060 in example 36 (all the other examples give results of the olefin conversion process measured only after a few hours) were exemplified and does not address the problem of ensuring that the catalyst is stable over longer periods such as described in figure 1 of this application.

In fact, Applicants found that by a selection of the Si/Al atomic ratio combined with a selection of process range such as the olefin partial pressure, the space velocity (LHSV) and the inlet temperature a high selectivity towards propylene was raised in order to get a propylene yield from 30 % to 50% based on the olefinic content of the feedstock, a stable olefin conversion over time and a stable olefinic product distribution in the effluent.

The present invention is based on the selection in the process of narrower ranges than those disclosed in EP 0109059 and EP 0109060. These narrower ranges provide a technical advantage. For example, table 11, page 57 of the current application shows the

effect of pressure on propylene yield. It is shown that when the pressure is outside the range claimed in the current application, but in the claim range of EP 0109060 (3 bar instead of 0.1-2 bar), the propylene yield is then outside the range claimed in this application (23,5 % instead of 30% to 50%).

The Applicants note that in the last paragraph of Item #4 of the Office Action, there is a reference to "this final action." The applicants also note that in Item #5 of the Office Action, there is a reference to "new grounds of rejection," which would not be appropriate for a final action. Insofar as there is a final action in the present application, the Applicants request it be withdrawn so that these arguments may be considered in light of the new grounds of rejection.

The Applicants believe that no extension of term is required. However, this conditional petition is being made to provide for the possibility that the Applicants have inadvertently overlooked the need for a petition and fee for extension of time. If an additional extension of time is required, please consider this a petition therefor. The Commissioner is hereby authorized to charge any fees due by filing this paper or to credit any overpayment to Account No. 03-3345.

On the basis of the above amendments and remarks, reconsideration of this application is requested and its allowance requested at the examiner's earliest convenience. No new matter has been added.

Respectfully submitted,

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